CLAIMS

1.   (Currently Amended) A pixel interpolation circuit for generating interpolation pixel data which interpolates an input image based on pixel data composing the input image, the pixel interpolation circuit comprising:

a plurality of interpolation circuits, each interpolation circuit independently calculating interpolation candidate data of the same interpolation pixel based on calculations performed on test interpolation data of a plurality of normal pixels neighboring the interpolation pixel, where each interpolation circuit uses a different interpolation method, wherein said test interpolation data is calculated for each of said normal pixels on the assumption that said normal pixels are lost using said different interpolation method;

a determining circuit for selecting one of the interpolation circuits based on a difference between the test interpolation data and actual pixel data of said plurality of normal pixels; and

an output circuit for outputting the interpolation candidate data calculated by the selected interpolation circuit as the interpolation pixel data.

2.   (Original) A pixel interpolation circuit according to claim 1, wherein the determining circuit calculates a evaluation data for each of the interpolation circuits, by summing up the absolute values of the difference between the test interpolation data and the actual pixel data, and selects one of the interpolation circuits based on the evaluation data.

3.   (Original) A pixel interpolation circuit according to claim 1, wherein the determining circuit calculates binarized or ternarized values of the difference between the test interpolation data and the actual pixel data.

4.   (Currently Amended) A pixel interpolation method for generating interpolation pixel data which interpolates an input image based on pixel data composing the input image, the pixel interpolation method comprising:

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calculating using a plurality of interpolation circuits, interpolation candidate data of a interpolation pixel independently by each of said plurality of interpolation circuits based on test interpolation data of a plurality of normal pixels neighboring the interpolation pixel, where each of said plurality of interpolation circuits use a different interpolation method, wherein said test interpolation data is calculated for each of said normal pixels on the assumption that said normal pixels are lost using said different interpolation method;

selecting one of the interpolation methods based on a difference between the test interpolation data and actual pixel data of said plurality of normal pixels; and

outputting the interpolation candidate data calculated by the selected interpolation method as the interpolation pixel data.

5.   (Original) A pixel interpolation method according to claim 4 further comprising,

calculating a evaluation data for each of the interpolation methods, by summing up the absolute values of the difference between the test interpolation data and the actual pixel data, wherein the interpolation method is selected based on the evaluation data.

6.   (Original) A pixel interpolation circuit according to claim 4 further comprising,

calculating binarized or ternarized values of the difference between the test interpolation data and the actual pixel data.

7.   (Original) An image scanner comprising a pixel interpolation circuit according to claims 1.